

What is claimed is:

1. A compound of Formula I or a pharmaceutically acceptable salt thereof



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wherein

R¹ is selected from the group consisting of straight or branched chain C₁₋₆ alkyl optionally substituted with amino, C₁₋₄ alkylamino or di(C₁₋₄ alkyl) amino, pyridinyl, pyrrolidinyl, piperidinyl, 2-thienyl, furanyl, imidazolyl, indenyl, benzofuran, C₃₋₆ cycloalkyl and phenyl optionally substituted with substituent independently selected from the group consisting of halogen, C₁₋₄ alkyl, C₁₋₄ alkoxy, trifluoromethyl, and trifluoromethoxy;

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A is -CH=CH-, 1,1-cyclopropyl, or -(CH₂)_n;

R² is C₁₋₄ alkyl, CF₃ or hydroxymethyl;

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R³, R⁴, R⁵ and R⁶ each are independently hydrogen or fluoro;

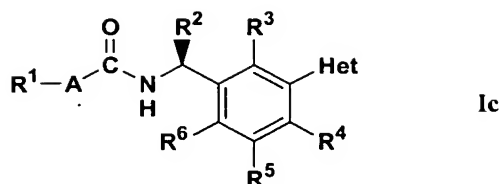
n is an integer of 0 to 4, inclusive;

Het is selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, thiazolyl, imidazolyl, isoxazolyl, oxazolyl, pyrazolyl and triazolyl optionally substituted with substituents independently selected from the group consisting of C₁₋₄ alkyl, halogen, amino and dimethylaminomethyl; provided that when Het is pyridinyl, pyrimidinyl or pyrazinyl, then A is not -CH=CH-.

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2. The compound of claim 1 having the Formula Ic or a pharmaceutically acceptable salt thereof

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wherein

R¹ is selected from the group consisting of straight or branched chain C₁₋₆ alkyl

- 5 optionally substituted with amino, C₁₋₄ alkylamino or di(C₁₋₄ alkyl) amino, pyridinyl, pyrrolidinyl, piperidinyl, 2-thienyl, furanyl, imidazolyl, indenyl, benzofuran, C₃₋₆ cycloalkyl and phenyl optionally substituted with substituent independently selected from the group consisting of halogen, C₁₋₄ alkyl, C₁₋₄ alkoxy, trifluoromethyl, and trifluoromethoxy;

- 10 A is -CH=CH-, 1,1-cyclopropyl, or -(CH₂)_n;

R² is methyl or hydroxymethyl;

R³, R⁴, R⁵ and R⁶ each are independently hydrogen or fluoro;

n is an integer of 0 to 4, inclusive;

Het is selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl,

- 15 thiazolyl, imidazolyl, isoxazolyl, oxazolyl, pyrazolyl and triazolyl optionally substituted with substituents independently selected from the group consisting of C₁₋₄ alkyl, halogen, amino and dimethylaminomethyl;

provided that when Het is pyridinyl, pyrimidinyl or pyrazinyl, then A is not -CH=CH-.

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3. The compound of claim 1 selected from the group consisting of:

(S)-3-(2-fluoro-phenyl)-N-[1-(3-[1,2,4]triazol-1-yl-phenyl)-ethyl]-acrylamide;

(S)-3-(2-fluoro-phenyl)-N-[1-(3-thiazol-2-yl-phenyl)-ethyl]-acrylamide;

(S)-3-(2-fluoro-phenyl)-N-[1-(3-pyrazol-1-yl-phenyl)-ethyl]-acrylamide;

- 25 (S)-3-(2-fluoro-phenyl)-N-[1-(3-imidazol-1-yl-phenyl)-ethyl]-acrylamide;

(S)-4-phenyl-N-[1-(3-pyridin-3-yl-phenyl)-ethyl]-butyramide;

(S)-N-[1-(3-pyridin-3-yl-phenyl)-ethyl]-benzamide;

(S)-1H-imidazole-4-carboxylic acid [1-(3-pyridin-3-yl-phenyl)-ethyl]-amide;

(S)-N-[1-(3-imidazol-1-yl-phenyl)-ethyl]-3-phenyl-acrylamide;

(S)-N-[1-(3-oxazol-5-yl-phenyl)-ethyl]-3-phenyl-acrylamide;
(S)-3-phenyl-N-[1-(3-thiazol-2-yl-phenyl)-ethyl]-acrylamide;
(S)-3-phenyl-N-[1-(3-pyrazol-1-yl-phenyl)-ethyl]-acrylamide; and
(S)-benzofuran-2-carboxylic acid {1-[3-(6-fluoro-pyridin-3-yl)-phenyl]-ethyl}-
5 amide; or a pharmaceutically acceptable salt thereof.

4. A pharmaceutical composition for the treatment of disorders responsive to opening of KCNQ potassium channels comprising a therapeutically effective amount of the compound of claim 1 in association with a pharmaceutically
10 acceptable carrier, adjuvant or diluent.

5. A method for the treatment of disorders responsive to opening of the KCNQ potassium channels in a mammal in need thereof, which comprises administering to said mammal a therapeutically effective amount of the
15 compound of claim 1.

6. The method of claims 5 wherein said disorders are acute and chronic pain, migraine, neuropathic pain, bipolar disorders, convulsions, mania, epilepsy, anxiety, depression and neurodegenerative disorders.
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7. The method of claim 6 wherein said disorder is migraine.

8. The method of claim 6 wherein said disorder is neuropathic pain.